



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,214	07/25/2001	Theodore C. Johnson	37167-8040.US00	6833
22918	7590	02/17/2006	EXAMINER	
PERKINS COIE LLP P.O. BOX 2168 MENLO PARK, CA 94026			PEFFLEY, MICHAEL F	
			ART UNIT	PAPER NUMBER
			3739	

DATE MAILED: 02/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/916,214  
Filing Date: July 25, 2001  
Appellant(s): JOHNSON ET AL.

**MAILED**  
**FEB 17 2006**  
**Group 3700**

Jacqueline F. Mahoney  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed September 19, 2005 appealing from the  
Office action mailed November 16, 2004.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 38-42 and 45-71 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gough et al (5,683,384).

Claims 38-42 and 45-71 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gough et al (5,800,484).

**(10) Response to Argument**

As asserted in the Final Office Action, both Gough et al references disclose a multiple arm device whereby an impedance sensor is located on each arm. As such, the examiner maintains that the arms represent an "impedance array" and that each arm represents a "sensor member". The point of argument remains whether or not the Gough et al references specifically teach or at least obviously suggest a separate impedance energy source for each sensor member. With regard to the Gough et al ('384) patent, column 6, lines 35-47 clearly state that the antennas may be "RF antennas, microwave antennas, as well as combinations thereof" and that the energy source may be a "combination RF/microwave box". Gough et al ('484) make the identical disclosure at column 5, lines 1-12. The examiner maintains that this disclosure meets the limitation of claim 1 which requires "each sensor member is operatively connected to a separate impedance energy source". Additionally, the examiner maintains that the Gough et al disclosure that the energy source may be combinations of energy sources strongly suggests to one of ordinary skill in the art that each sensor (and electrode) may be connected to a separate energy source.

First, regarding the recitation that “each sensor member is operatively connected to a separate impedance energy source”, it is the examiner’s position that a reference that shows, for example, five electrode/sensor members and discloses that two of those sensor members are connected to separate energy sources would inherently meet the claim limitation, particularly since the impedance array is set forth as “comprising a plurality of resilient members”. The open-ended term “comprising” clearly allows the examiner to provide additional elements while still meeting the constraints of the claim language. As such, even if the Gough et al references do not specifically disclose a separate energy source connected to each and every electrode/sensor member, the disclosure of these references may still be deemed to meet the claim language since it clearly recites at least two energy sources connected to the two electrodes (14,16). The examiner maintains that the disclosure of providing a combination of energy sources inherently, that is, necessarily, provides at least two electrode/sensor members (i.e. a plurality) coupled to separate energy sources. This argument is specifically directed at applicant’s statements at pages 4 and 5 of the Appeal Brief. The last sentence of page 4 and continuing to page 5 of the Brief suggests that a combination of energy sources may provide many configurations, including some electrodes coupled to one source and some electrodes coupled to an energy source. The examiner maintains that even if this were the case with the Gough et al references, the Gough et al references would still meet the recited claims in view of the “comprising” language used in the claim. The examiner would be well within the bounds of examination to select one electrode from the first group, and one electrode from the second group and maintain that Gough et al

Art Unit: 3739

teach a system comprising a plurality of electrode/sensor members (i.e. one from each group) with each electrode/sensor member coupled to a separate energy source.

With regard to the rejection of the claims under obviousness, the examiner maintains that in addition to inherently suggesting that at least two electrode/sensor members may be connected to separate energy sources, Gough et al suggest that all electrode/sensor members may be connected to separate energy sources. In particular, Gough et al clearly suggest that a combination of energy sources may be used, and teach of using electrode arrays having between two and five electrodes. Clearly, embodiments having fewer electrode/sensor members (e.g. two) would have to have each electrode coupled to a separate source if a combination of energy sources were used. The examiner maintains that the step of providing an additional energy source for an additional (i.e. third) electrode/sensor member would clearly be at the obvious discretion of one of ordinary skill in the art in view of the Gough et al teaching of using multiple energy sources.

Applicant's arguments that the Gough et al references are not concerned with localized impedance are not found persuasive. As asserted on page 7, second full paragraph of the Brief, localized impedance measurement enables the user to detect, locate and identify tumorous tissue as well as monitor a target tissue site and control the course of ablative therapy. Column 6, line 66 through column 7, line 15 of the Gough et al ('384) reference clearly discloses identifying ablation geometries (e.g. identifying tumorous tissue) and controlling energy delivery based on sensed impedance to avoid destroying too much tissue. Energy delivery to the electrodes is controlled based on the

Art Unit: 3739

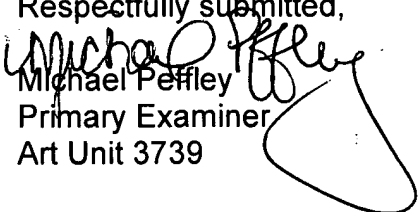
sensed impedance. Similar disclosure is found in the Gough et al ('484) patent at column 5, lines 38-59. In as much as the Gough et al references are concerned with determining impedance at each sensor to monitor the growth of the ablation area, it seems intuitive that they are concerned with "localized impedance" as they seek to prevent the ablation area growing beyond the location of the sensors. The manner in which the impedance is determined (i.e. using voltage calculations) does not appear to have any detrimental application to the claim language. Again, both the Gough et al references disclose connecting the electrode/sensor members to separate energy sources to monitor and control the delivery of ablative energy. The examiner maintains the rejections should be maintained.

**(11) Related Proceeding(s) Appendix**

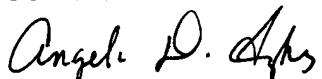
No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.


For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
Michael Pettley  
Primary Examiner  
Art Unit 3739

Conferees:

  
Angela Sykes  
Supervisory Primary Examiner

  
Lee Cohen  
Primary Examiner